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**Position** Associate professor of genetics  
**Affiliation:** Department Medical Laboratory  
Sciences – Faculty of Science, Al-  
Balqa applied University  
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### Education

2005	<b>Doctor of Philosophy</b> , Genetics, Friedrich Schiller University, Germany On the relationship between biotic and abiotic habitat diversity and genetic diversity of <i>Ranunculus acris</i> L. (Ranunculaceae), <i>Plantago lanceolata</i> L. (Plantaginaceae), and <i>Anthoxanthum odoratum</i> L. (Poaceae) within and between grassland sites
2001	<b>Master of Science</b> , Biology, Yarmouk University, Irbid, Jordan (Rank: <b>Very Good</b> ).
1998	<b>Bachelor of Science</b> , Genetics and Molecular Biology, Jordan University of Science and Technology, Irbid, Jordan (Rank: <b>Very Good</b> ).

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### Research Experience

2013	<b>Fulbright fellowship</b> — [University of Athens, GA, USA]
2006	<b>Max Planck fellowship</b> — [Max Planck institute, Jena, Germany]

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### Teaching Experience

2008-2009	<b>Lecturer</b> , Al Hussein Bin Talal University, Maan, Jordan
2009-2012	<b>Assistant professor</b> , Al Hussein Bin Talal University, Maan, Jordan
2013-2015	<b>Associate professor</b> , Al Hussein Bin Talal University, Maan, Jordan

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### Recent Publications

2021	ARAT Ayah Awad, Nidal Odat, Saeid Abu-Romman, Maen Hasan. Effect of Salinity on Germination and Root Growth of Jordanian Barley. Journal of Ecological Engineering, 22, 1-8.
2020	Ruba Muhammad Soud AL-Issa, Nidal Odat, Issam Qrunfleh, Maen Hasan. The impact of NaCl on different genotypes of tomato ( <i>Solanum</i>

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	<i>Lycopersicon</i> Mil) on germination, some physiology characteristics and gene expression. EurAsian Journal of BioSciences 14 (1), 4467-4470
2020	Anhar Al-Turk, Nidal Odat, Muhannad Masadeh. Isolation and Molecular Characterization of Antibiotic Producing <i>Bacillus licheniformis</i> Strains Isolated from soil. International Journal of Pure and Applied Microbiology 14 (4), 1-8.
2020	Nidal Odat. Genotypic variation in germination and some growth parameters of wheat ( <i>Triticum turgidum</i> spp. <i>durum</i> ) in response to the toxic effect of aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) nanoparticle. Research on crops 21 (3), 441-445
2020	ARM Al-Tawaha, N Jahan, N Odat, EAD Al-Ramamneh, AR Al-Tawaha. Growth, Yield and Biochemical Responses in Barley to DAP and Chitosan Application Under Water Stress. Journal of Ecological Engineering 21 (6), 86-93.
2020	Odat N. Intraspecific genetic variation within and between improved cultivars and landraces of durum wheat in germination and root architectural traits under saline conditions. International journal of plant biology, 11: 7413-7419.
2018	Odat N. Differential Gene Expression of Durum Wheat ( <i>Triticum turgidum</i> L. var. <i>durum</i> ) in Relation to Genotypic Variation Under NaCl Salinity Stress. Jordan journal of biological sciences 11 (5): 591-595.
2017	Odat N. Differential Responses in Germination, Growth and Genes Expression of Cu/Zn- and Fe-superoxide Dismutase of Barley Under Salinity Stress. Adv Crop Sci Technol 5:2329–8863
2017	Maher Obeidat AA-A Saeed Abu-Romman, Nidal Odat, Moawiya Haddad, Hawari A. Antimicrobial and Insecticidal Activities of n-Butanol Extracts from Some Streptomyces Isolates. Res J Microbiol 1816–4935.
2015	Nidal Odat Maen K Hasan, Maher S Obeidat, Mohamad A Shatnawi, Saeid M Abu-Romman, Issam M Qrunfleh, Massadeh MI. Identifying Selection Signatures Related to Domestication Process in Barley ( <i>Hordeum vulgare</i> L.) Landraces of Jordan Using Microsatellite Markers. Jordan J Biol Sci 8:307–313
2015	Nidal Odat SA, Hazem S Hasan, Maher Obeidat. Relationships between species diversity and evenness of necrophagous Diptera and environmental conditions in three habitats of Jordan. J Entomol Zool Stud 3:89–94
2014	Al-Rawwash M, Alodat M, Odat N (2014) Normal population parameters



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	estimation using moving ranked set sampling: grassland biodiversity application. <i>Chil J Stat</i> 5:87–101.
2014	Saleem Aladaileh A-RA-T Sulaiman Alnaimat, Amir Alhroob, Odat N. The Effect of Phosphate Ore on the Immunomodulatory Activities of Haemocytes of the Marine Snail, <i>Planaxis sulcatus</i> (Born, 1778) in the Gulf of Aqaba, Jordan. <i>Glob Vet</i> 12:410–419.
2012	Abu-Darwish MS, Alu'datt MH, Al-Tawaha AR, et al. Seasonal variation in essential oil yield and composition from <i>Thymus vulgaris</i> L. during different growth stages in the south of Jordan. <i>Nat Prod Res</i> 26:1310–1317.
2012	Qu C, Hasan M, Lu K, et al. Genetic diversity and relationship analysis of the <i>Brassica napus</i> germplasm using simple sequence repeat (SSR) markers. <i>Afr J Biotechnol</i> 11:6923–6933.
2011	Odat, N, KHATEEB WA, Muhaidat R, et al (2011) The effect of exotic <i>Acacia saligna</i> tree on plant biodiversity of Northern Jordan. <i>Biol</i> 13.
2011	Mohamad S. Abu Darwish WMAK Muhammad H Aludatt, Abdel Rahman Al Tawaha, Halil Ereifej, Ali Almajwal, Nidal Odat (2011) Seasonal variation in essential oil yield and composition from <i>Thymus vulgaris</i> L. during different growth in the south of Jordan. <i>Nat Res Prod</i> 26:1310–1317.
2010	Al-Rawwash M, Alodat M, Aludaat K, et al. Prediction intervals for characteristics of future normal sample under moving ranked set sampling. <i>Statistica</i> 70:137.
2010	Al-Khateeb W, Muhaidat R, Odat N, et al. Interactive effects of salinity, light, and temperature on seed germination of <i>Zygophyllum simplex</i> L. ( <i>Zygophyllaceae</i> ) in Jordan. <i>Int J Integr Biol</i> 10:9–13.
2010	AL-TAWAHA ARM, Odat, N. Use of sorghum and maize allelopathic properties to inhibit germination and growth of wild barley ( <i>Hordeum spontaneum</i> ). <i>Not Bot Horti Agrobot Cluj-Napoca</i> 38:124.
2009	Odat N, Alodat M T, Muhaidat R. Predicting species relative abundance in ecological communities.
2009	Odat N, Hellwig FH, Jetschke G, Fischer M. On the relationship between plant species diversity and genetic diversity of <i>Plantago lanceolata</i> ( <i>Plantaginaceae</i> ) within and between grassland communities. <i>J Plant Ecol</i> 3:41–48.
2008	Alodat M, Odat N, Muhaidat R, Beldjillali H. Estimation of power function distribution with application to ecological relative abundance. <i>Stat Appl</i> 6:181–192.
2008	Al-Tawaha AR, Odat N. Genomic and chemical approaches of weed

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	control. <i>J Food Agric Environ</i> 6:90–95.
2007	Al-Zibdah M, Odat N. Fishery status, growth, reproduction biology and feeding habit of two scombrid fish from the Gulf of Aqaba, Red Sea. <i>Leban Sci J</i> 8:3–20.
2007	Al-Zibdah M, Odat N. Some findings related to the fishery status, growth, reproduction biology and feeding habit of two Scombrid fish from Gulf of Aqaba, Red Sea. <i>BMBF Red Sea Program</i> 1–3.
2006	Al-Zibdah, Mohammad, Khalaf M, Odat N. The fishery status in Jordan's Gulf of Aqaba, Red Sea. <i>Dirasat Pure Sci</i> 33:25–33
2005	Odat N. On the relationship between biotic and abiotic habitat diversity and genetic diversity of <i>Ranunculus acris</i> L.(Ranunculaceae), <i>Plantago lanceolata</i> L.(Plantaginaceae), and <i>Anthoxanthum odoratum</i> L.(Poaceae) within and between grassland sites. PhD thesis. FSU, GERMANY.
2005	Perner J, Wytrykush C, Kahmen A, et al. Effects of plant diversity, plant productivity and habitat parameters on arthropod abundance in montane European grasslands. <i>Ecography</i> 28:429–442.
2004	Odat N, Jetschke G, Hellwig FH. Genetic diversity of <i>Ranunculus acris</i> L. (Ranunculaceae) populations in relation to species diversity and habitat type in grassland communities. <i>Mol Ecol</i> 13:1251–1257
2003	Odat N, others. Length-weight relationship of fishes from coral reefs along the coastline of Jordan (Gulf of Aqaba). <i>Naga</i> 26:9–10
2001	Audorff V. WW. Kahmen, A.Wytrykush C.Odat N.Jetschke G.Perner J.Buchmann N. Biodiversity and ecosystem function in grasslands: the effects of insect herbivory and drought stress. <i>Field Campaign. Bonn Biol Eur Afr.</i>
2002	Wolfgang W.W. BN Kahmen A.Wytrykush C.Odat N.Audorff V.Perner J.Jetschke G. Biodiversity and Ecosystem Process in Thuringen grasslands. <i>Ecol Soc Am</i>
2001	Jetschke G, Hellwig F., N. O. Genetic and Phenotypic Diversity and Response to Disturbances in Grassland Systems: Modelling and Empirical Research. <i>Biol Program Biodivers Glob Change</i>
2000	Odat N, S M, M K, M E-Z. Assessment of fisheries stocks with emphasis on Scombridae in the Jordanain Gulf of Aqaba, Red Sea. <i>Ger Fed Minist Educ Res BMBF.</i>
2001	Odat N. Assessment of fisheries stocks with emphasis on Scombridae in Gulf of Aqaba. PhD Thesis, Yarmouk University, Jordan.

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### Conferences/ Workshops/ Seminars:

July 2003	Invited Speaker: The relationship between genetic diversity of buttercup <i>Ranunculus acris</i> and species diversity and habitat types of grasslands ecosystems. Institute of ecology, FSU Jena
November 2003	Invited Speaker: The genetic diversity of <i>Ranunculus acris</i> and <i>Anthoxanthum odoratum</i> in relation to grasslands species diversity in Central Germany. Institute of Plant Breeding and Crop Science I of University of Giessen, Giessen, Germany.
January 2005	Invited Speaker: Studies on the genetic diversity of <i>Ranunculus acris</i> , <i>Plantago lanceolata</i> , and <i>Anthoxanthum odoratum</i> in grassland sites of central Germany. Institute of ecology, FSU Jena
May 2007	Invited Speaker: Statistical analysis of codon usage bias of human disease genes. Jordanian Conference in statistics and its applications, Yarmouk University, Jordan
October 2007	Invited Speaker: Biodiversity from gene to ecosystem. Department of Biology, Al Hussein Bin Talal University

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### Supervised Doctoral & Master Theses:

	<b>Master</b>
2015	1. Aya Awad, genetic diversity and gene expression response to salinity stress in barley, Al Balqa Applied University, Jordan
2015	2. Mesa Swees, differential response in gene expression and genetic diversity in relation to allopathic effects, Al Balqa Applied University, Jordan
2016	3. Ruba Al Esa, differential responses of tomato to salinity in term of gene diversity and expression pattern, Al Balqa Applied University, Jordan
2016	4. Mesa Al Faris, Cloning, Sequence Analysis, and Expression Profile of a Superoxide Dismutase Gene from Lentil, Al Balqa Applied University, Jordan
2017	5. Hiba Ramadan, Isolation and Expression Analysis of Ascorbate Peroxidase Gene from Lentil, Al Balqa Applied University, Jordan

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### Research Grants

2010	1. Project title: BIONET - Mediterranean Green Biotech Network, ENPI Programme ( <a href="http://www.enpicbmed.eu">www.enpicbmed.eu</a> ), European Union, Dr. Muhammad H.
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	Aludatt, Dr.Mohammad Sanad Abu darwish, Dr. Nidal Odat. Finished.
	2. Effects of pollutants on marine invertebrate's diversity of Gulf of Aqaba., Deanship of Research, Al Hussein Bin Talal Univeristy, JORDAN, Dr. Salim Adaliah, Dr. Nidal Odat. Finished.
2011	3. Plant Elicitors and medicinal plants of Jordan., Deanship of Research, Al Hussein Bin Talal University, JORDAN, Dr. A. Tawaha, Dr. Nidal Odat, Dr. Faisal Ababneh, JORDAN. Finished.
2011	4. BIONET - Mediterranean Green Biotech Network, ENPI Programme (www.enpicbmed.eu), European Union, Dr. Muhammad H. Aludatt, Dr.Mohammad Sanad Abu darwish, Dr. Nidal Odat. Finished.
2017	5. The effects of salinity on barley of Jordan with regard to gene expression of stress related genes. 7000 USD.
2017	6. Project title: The effects of combined effects of salicylic acid and salinity on barley molecular genetics. 7000 USD. Finish
2017	7. The effect of salinity on cultivated wheat of Jordan, physiological and molecular studies. 7000 USD. Finish
2018	8. Studying leaf rust-induced genes in Jordanian durum wheat in relation to population genetic diversity of the causative fungus ( <i>Puccinia triticina</i> ) using cDNA-AFLP technique and microsatellite markers. 1140,000 USD. Funded by Jordan ministry of education and research. on Going